

5/36

DART AEROSPACE LTD	Work Order:	24079
Description: Long Step Assembly – High Skid, LH	Part Number:	D350-591-311
		704A 41 640 012d
Dwg: D3272 Rev. A	Qty:	10
		Page 1 of 2

Step	Location	Procedure	By	Date	Qty																				
1	DC	Issue Traveller Dwg not required	AF	05.08.23	10																				
2	DC	Photocopy bluefile and type labels as per PPP D350-591-311 CHG001 WK 34 AF	DA	05-08-23	10																				
3	GA	Cut D2622-120 extrusion to 116.25" long as per Dwg D3272 using cutting table setup DT 8185-2A Pick: <table><tr><td>Qty</td><td>Part Number</td><td>Description</td><td>Batch</td></tr><tr><td>1</td><td>D2622-120C</td><td>Extrusion</td><td>B24092</td></tr></table>	Qty	Part Number	Description	Batch	1	D2622-120C	Extrusion	B24092	SE	06.02.27	10												
Qty	Part Number	Description	Batch																						
1	D2622-120C	Extrusion	B24092																						
4	GA	Drill extrusion as per Dwg D3272 using Jig DT8680 for rivets.	SE	06.02.27	10																				
5	GA	Deburr	SE	06.02.27	10																				
6	QC5	Inspect work to Step 5	SE	06.02.27	10																				
7	WA	Bevel end for welding FWD ONLY	SE	06.02.27	10																				
8	WA	Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272 Pick: <table><tr><td>Qty</td><td>Part Number</td><td>Description</td><td>Batch</td></tr><tr><td>1</td><td>D3067-1</td><td>End Plate</td><td>B24097</td></tr><tr><td>2</td><td>D3219-1</td><td>Support</td><td>B24094</td></tr><tr><td>A/R</td><td></td><td>Aluminum Rod</td><td>M18838</td></tr></table>	Qty	Part Number	Description	Batch	1	D3067-1	End Plate	B24097	2	D3219-1	Support	B24094	A/R		Aluminum Rod	M18838	SE	06.02.28	10				
Qty	Part Number	Description	Batch																						
1	D3067-1	End Plate	B24097																						
2	D3219-1	Support	B24094																						
A/R		Aluminum Rod	M18838																						
9	GA	Grind End Plate flush	SE	06.02.28	10																				
10	QC9 & 5	Inspect weld and work to Step 9	PD	06-03-01	10																				
11	FP	Chemical conversion coat as per QSI 005 4.1	SAD	06.03.02	10																				
12	GA	Assemble Leg Assembly as per Dwg D3272. (D3066-1 is part of D3065-041 Step Leg Assembly, do not add to BOM.) Pick: <table><tr><td>Qty</td><td>Part Number</td><td>Description</td><td>Batch</td></tr><tr><td>1</td><td>D3065-041</td><td>Step Leg Assy</td><td>B24408 = 1 pc</td></tr><tr><td>2</td><td>D3066-1</td><td>Spacer</td><td>B24093 = 9 pcs</td></tr><tr><td>16</td><td>MS20600AD4W4</td><td>Rivet</td><td>B25056</td></tr><tr><td></td><td></td><td></td><td>M19185</td></tr></table>	Qty	Part Number	Description	Batch	1	D3065-041	Step Leg Assy	B24408 = 1 pc	2	D3066-1	Spacer	B24093 = 9 pcs	16	MS20600AD4W4	Rivet	B25056				M19185	SE	06.03.04	10
Qty	Part Number	Description	Batch																						
1	D3065-041	Step Leg Assy	B24408 = 1 pc																						
2	D3066-1	Spacer	B24093 = 9 pcs																						
16	MS20600AD4W4	Rivet	B25056																						
			M19185																						
13	QC5	Inspect work to step 12	PD	06.03.06	10																				
14	WA	Bevel Aft end for welding	SE	06.03.06	10																				
15	WA	Inspect for foreign object as per QSI 024	SE	06.03.06	10																				
16	WA	Weld Aft End Plate as per QSI 004 & Dwg D3272 Pick: <table><tr><td>Qty</td><td>Part Number</td><td>Description</td><td>Batch</td></tr><tr><td>1</td><td>D3067-1</td><td>End Plate</td><td>B24097</td></tr><tr><td>A/R</td><td></td><td>Aluminum Rod</td><td>M18838</td></tr></table> Identify as D3272-041	Qty	Part Number	Description	Batch	1	D3067-1	End Plate	B24097	A/R		Aluminum Rod	M18838	SE	06.03.06	10								
Qty	Part Number	Description	Batch																						
1	D3067-1	End Plate	B24097																						
A/R		Aluminum Rod	M18838																						

RELEASED
04.03.22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: 1 Date: 06/03/20

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

DART AEROSPACE LTD		Work Order:	24079
Description: Long Step Assembly – High Skid, LH		Part Number:	D350-591-311
Dwg: D3272 Rev. A		Qty:	10
		704A 41 640 012	
		Page 2 of 2	

Step	Location	Procedure	By	Date	Qty																																																																
17	GA	Grind End Plate flush																																																																			
18	QC9 & 5	Inspect work to Step 17 – Check dimension 108.93" & 3.375" as per Dwg D3272		06-03-06	10																																																																
19	FP	Powder Coat Gloss White (Ref: 4.3.5.1) as per QSI 005 4.3		06-03-07	10																																																																
20	FP	Wing Walk as per Dwg D3272 and QSI 005 4.4	DL	06/03/15	10																																																																
21	QC3	Inspect Powder Coat and Wing Walk	DL	06/03/15	10																																																																
22	KP	<p>Pick: Packing Kit (Note: D3272-041 is on BOM as material listed in Step 3)</p> <table><thead><tr><th>Qty</th><th>Part Number</th><th>Description</th><th>Batch</th></tr></thead><tbody><tr><td>4</td><td>D2230-3</td><td>Mounting Lug</td><td>B24090</td></tr><tr><td>2</td><td>D2618</td><td>Bushing</td><td>B24091 ✓</td></tr><tr><td>2</td><td>D2856-400-720</td><td>Abrasion Strip</td><td>B242378 ✓</td></tr><tr><td>2</td><td>D3235-1</td><td>Mounting Lug</td><td>14 X B24091/6 X B24567</td></tr><tr><td>1</td><td>D3272-041</td><td>Step Assembly</td><td>B24079</td></tr><tr><td>1</td><td>D3278-041</td><td>Support Assembly</td><td>B24096</td></tr><tr><td>2</td><td>AN3-35A</td><td>Bolt</td><td>M17944 ✓</td></tr><tr><td>8</td><td>AN4-13A</td><td>Bolt</td><td>M18369 ✓</td></tr><tr><td>2</td><td>AN5-36A</td><td>Bolt</td><td>M16114 ✓</td></tr><tr><td>4</td><td>AN960JD10</td><td>Washer</td><td>M19521 ✓</td></tr><tr><td>16</td><td>AN960JD416</td><td>Washer</td><td>M19085 ✓</td></tr><tr><td>4</td><td>AN960JD516</td><td>Washer</td><td>M18254 ✓</td></tr><tr><td>2</td><td>MS21042L3</td><td>Nut (or -3)</td><td>M18917 ✓</td></tr><tr><td>8</td><td>MS21042L4</td><td>Nut (or -4)</td><td>(37 pcs) M17997 & M19009 (43 pcs)</td></tr><tr><td>2</td><td>MS21042L5</td><td>Nut (or -5)</td><td>M19073 ✓</td></tr></tbody></table>	Qty	Part Number	Description	Batch	4	D2230-3	Mounting Lug	B24090	2	D2618	Bushing	B24091 ✓	2	D2856-400-720	Abrasion Strip	B242378 ✓	2	D3235-1	Mounting Lug	14 X B24091/6 X B24567	1	D3272-041	Step Assembly	B24079	1	D3278-041	Support Assembly	B24096	2	AN3-35A	Bolt	M17944 ✓	8	AN4-13A	Bolt	M18369 ✓	2	AN5-36A	Bolt	M16114 ✓	4	AN960JD10	Washer	M19521 ✓	16	AN960JD416	Washer	M19085 ✓	4	AN960JD516	Washer	M18254 ✓	2	MS21042L3	Nut (or -3)	M18917 ✓	8	MS21042L4	Nut (or -4)	(37 pcs) M17997 & M19009 (43 pcs)	2	MS21042L5	Nut (or -5)	M19073 ✓			
Qty	Part Number	Description	Batch																																																																		
4	D2230-3	Mounting Lug	B24090																																																																		
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2	MS21042L5	Nut (or -5)	M19073 ✓																																																																		
23	QC4	Inspect Kit 100% for Completeness on the W/O	AP	06/03/17	10																																																																
24	PK	Package for shipping as per PPP D350-591-311		6/3/17	10																																																																
25	AC	Cost / part	Rev B	06/03/17	10																																																																
26	DC	Close W/O		06-03-17	10																																																																
		Inspect Level 21		06/03/20	10																																																																

Rev	Date	Change	Revised By	Approved
A	04.03.22	New issue	KJ/RF	

RELEASED
04.03.22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Aug 18, 2005
10:59 am

Work Order No	: 0024079	Department Code:	
Project Name	: D350-591-311	Burden Flags	: NNNNNNNN
Project For	: WK536	WO Status	: Open
Work Order Type	: Main	Invoice State	: Not Invoiced
Main WO Number	:	Invoice Date	:
House Part Number	: *D350-591-311	Invoice Number	:
Description	: Heli-Access-Step, LH Hi	Invoice Amount	: 0.00
Manufactured	: Yes		
Amount Req'd	: 10	Order Entry No	:
Amount Done	: 0	OE Value	: 0.00
Start Date	: 08-16-05		
Est Finish Date	: 09-09-05	Est Mark Up	: 0.000%
Act Finish Date	:	Actual Mark Up	: 0.000%
Drawings Req'd	: No		
Ok for Approval	:		
Approval Rec'd	:	\$0 Posted to Finished Goods	

	Estimated	Actual	Var. %	Posted	To Post
Material Cost	0.00	0.00	0.00	0.00	0.00
Engineering Hours	0.00	0.00	0.00		
Engineering Cost	0.00	0.00	0.00	0.00	0.00
Production Hours	0.00	0.00	0.00		
Production Cost	0.00	0.00	0.00	0.00	0.00
Packaging Hours	0.00	0.00	0.00		
Packaging Cost	0.00	0.00	0.00	0.00	0.00
OverHead Hours	0.00	0.00	0.00		
OverHead Cost	0.00	0.00	0.00	0.00	0.00
CNC Hours	0.00	0.00	0.00		
CNC	0.00	0.00	0.00	0.00	0.00
Misc. Hours	0.00	0.00	0.00		
Misc.	0.00	0.00	0.00	0.00	0.00
=====					
Burden	0.00	0.00	0.00		
=====					
Total Cost	0.00	0.00	0.00		
Mark up	0.000	0.000			
Selling Cost	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done	0.00	0.00
Profits/(Loss)	0.00	0.00

Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Nov 08, 2005
10:51 am

Work Order No : 0024079
Project Name : D350-591-311
Project For : WK536
Work Order Type : Main
Main WO Number :
House Part Number : *D350-591-311
Description : Heli-Access-Step, LH Hi
Manufactured : Yes
Amount Req'd : 10
Amount Done : 0
Start Date : 08-16-05
Est Finish Date : 09-09-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Margin : 0.000%
Actual Margin : 0.000%
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost	0.00	0.00	0.00	0.00	0.00
Engineering Hours	0.00	0.00	0.00		
Engineering Cost	0.00	0.00	0.00	0.00	0.00
Production Hours	0.00	1.00	100.00		
Production Cost	0.00	24.11	100.00	0.00	24.11
Packaging Hours	0.00	0.00	0.00		
Packaging Cost	0.00	0.00	0.00	0.00	0.00
OverHead Hours	0.00	0.00	0.00		
OverHead Cost	0.00	0.00	0.00	0.00	0.00
CNC Hours	0.00	0.00	0.00		
CNC	0.00	0.00	0.00	0.00	0.00
Misc. Hours	0.00	0.00	0.00		
Misc.	0.00	0.00	0.00	0.00	0.00
Burden	0.00	0.00	0.00		
Total Cost	0.00	24.11	100.00		
Margin	0.000	0.000			
Selling Cost	0.00	24.11			

Labour Hrs/Amount Done	Estimated	Actual
	0.00	0.00
Profits/(Loss)	0.00	(-24.11)

WIS open b21
W
11-11

Date: Wednesday, 11/9/2005 12:39:31 PM
 User: Linda Lacelle

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: LONG STEP ASSEMBLY HIGH SKID LH
Job Number	: 24079		
Estimate Number	: 10270		
P.O. Number	:	Part Number	: D350591311
This Issue	: 11/9/2005	S.O. No.	:
Prsht Rev.	: NC	Drawing Number	: D3272 REV A
First Issue	: / /	Project Number	:
Previous Run	: 23823	Drawing Revision	: A
	Type : LARGE FAB ASSY	Material	:
Written By	:	Due Date	: 11/30/2005
Checked & Approved By	:	Qty:	10
Comment	: Est Rev:A 04.03.22 New issue KJ/RF	Um:	Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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**Comment:** DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

2.0	D2622120C	Extrusion
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3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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**Comment:** LARGE FABRICATION RESOURCE 1

1-Cut D2622-120 extrusion to 116.25" long as per Dwg D3272 using cutting table setup DT 8185-2A

2-Drill extrusion as per Dwg D3272 using Jig DT8680 for rivets.

3-Deburr

4.0	QC5	INSPECT WORK TO CURRENT STEP
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**Comment:** INSPECT WORK TO CURRENT STEP

5.0	D30671	End Plate
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6.0	D32191	Support
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7.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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**Comment:** LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod _____

Date: Wednesday, 11/9/2005 12:39:31 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 24079

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

3-Grind End Plate flush

8.0

QC5/9

WELD INSPECTION



Comment: Inspect weld and work to Step 9

9.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

10.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

11.0

D3065041

Step Leg Assembly

12.0

D30661

Spacer

13.0

MS20600AD4W4

Rivets

14.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Assemble Leg Assembly as per Dwg D3272.

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

16.0

D30671

End Plate

17.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod _____

4-Grind End Plate flush

Date: Wednesday, 11/9/2005 12:39:32 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 24079

Part Number: D350591311

Job Number:



Seq. #:	Machine Or Operation:	Description :
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18.0	QC5/9	WELD INSPECTION
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Comment: Inspect work & Weld to Current - Check dimension 108.93" & 3.375" as per Dwg D3272

19.0	POWDER COATING	POWDER COATING
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Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

20.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3272 and QSI 005 4.4

21.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
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Comment: Inspect Powder Coat and Wing Walk

22.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Pick Packing Kit

23.0	D22303	Mounting Lug
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24.0	D2618	Bushing
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25.0	D2856400720	Abrasion Strip
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26.0	D32351	Mounting Lug
------	--------	--------------

27.0	D3272041	Step Assembly
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28.0	D3278041	Support Assembly
------	----------	------------------

29.0	AN335A	Bolt
------	--------	------

30.0	AN413A	Bolt
------	--------	------

31.0	AN536A	BOLT
------	--------	------

32.0	AN960JD10	Washer
------	-----------	--------

33.0	AN960JD416	Washer
------	------------	--------

34.0	AN960JD516	Washer
------	------------	--------

35.0	MS21042L3	Nut
------	-----------	-----

36.0	MS21042L4	Nut
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Date: Wednesday, 11/9/2005 12:39:32 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 24079

Part Number: D350591311

Job Number:



Seq. #:	Machine Or Operation:	Description :
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37.0	MS21042L5	Nut
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38.0	QC4	INSPECT 100% KITS FOR COMPLETENESS
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Comment: INSPECT 100% KITS FOR COMPLETENESS

39.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-311

Location: _____

40.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Inspection Level 21

Job Completion

